

**BEFORE**  
**THE PUBLIC SERVICE COMMISSION OF**  
**SOUTH CAROLINA**  
**DOCKET NO. 2019-1-E**  
**May 31, 2019**

IN RE: Annual Review of Base Rates for Fuel )  
Costs of Duke Energy Progress, LLC ) **STIPULATION**

This Stipulation is made by and among the South Carolina Office of Regulatory Staff (“ORS”), Nucor Steel – South Carolina (“Nucor”), and Duke Energy Progress, LLC (“DEP” or the “Company”) (collectively referred to as the “Parties” or sometimes individually as a “Party”).

WHEREAS, the above-captioned proceeding has been established by the Public Service Commission of South Carolina (“Commission”) pursuant to the procedure established in S.C. Code Ann. § 58-27-865, and the Parties to this Stipulation are parties of record in the above-captioned docket;

WHEREAS, the Parties have varying legal positions regarding the issues in this case;

WHEREAS, the Parties have engaged in discussions to determine whether a stipulation of the issues would be in their best interests;

WHEREAS, following these discussions the Parties have each determined that their interests and the public interest would be best served by stipulating all issues in the above-captioned case under the terms and conditions set forth below:

**A. STIPULATION OF TESTIMONY AND WAIVER OF CROSS EXAMINATION**

A.1 The Parties agree to stipulate into the record before the Commission the pre-filed direct testimony and exhibits of ORS witnesses Anthony D. Briseno, Dawn M. Hipp, and Michael L. Seaman-Huynh, without objection or cross-examination by the Company. The Parties also

agree to stipulate into the record before the Commission, without objection or cross-examination by ORS, the direct testimony and exhibits of DEP witnesses Dana M. Harrington, Kevin Y. Houston, and Kelvin Henderson (including Confidential Exhibit No. 3), Jason D. Martin, Brett Phipps, Glen A. Snider, Julie K. Turner. The Parties further agree to stipulate into the record the pre-filed supplemental direct testimony and exhibits of Dana M. Harrington without objection, change, amendment or cross-examination with the exception of changes comparable to that which would be presented via an errata sheet or through a witness noting a correction.

A.2 The Parties reserve the right to engage in re-direct of witnesses as may be necessary to respond to issues raised by the examination of their witnesses by non-signatories to this Stipulation.

A.3 The Parties agree that no other evidence will be offered in the proceeding by the Parties other than the stipulated testimony and exhibits and this Stipulation with the exception of changes comparable to that which would be presented via an errata sheet or through a witness noting a correction or clarification or by a witness adopting the testimony of another if permitted by the Commission.

## **B. STIPULATION TERMS**

B.1 As a compromise to positions advanced by the Parties, the Parties agree to the proposal set out immediately below, and this proposal is hereby adopted, accepted, and acknowledged as the agreement of the Parties.

B.2 Without prejudice to the position of any Party in future proceedings, the Parties agree to accept all recommendations and adjustments in the testimony and exhibits of ORS witnesses.

### Avoided and Incremental Costs, Net Energy Metering and Distributed Energy Resources

B.3 The Parties agree for purposes of this stipulation and without prejudice to the position of any Party in any future proceeding that the 2019 component values for the Net Energy Metering (“NEM”) Distributed Energy Resources, as shown in Table 1 in the testimony of DEP witness Snider and listed below comply with the NEM methodology approved by the Commission in Order No. 2015-194 and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.*

<b>Components of NEM Distributed Energy Resource Value</b>	<b>Component value (\$/kWh) Residential PV<sup>1</sup></b>	<b>Component value (\$/kWh) SGS PV<sup>1</sup></b>	<b>Component value (\$/kWh) Large PV<sup>1</sup></b>
Avoided Energy Cost	\$0.036187	\$0.036176	\$0.036184
Avoided Capacity Cost	\$0.013408	\$0.013407	\$0.013322
Ancillary Services	\$0.000000	\$0.000000	\$0.000000
T&D Capacity	\$0.000000	\$0.000000	\$0.000000
Avoided Criteria Pollutants <sup>2</sup>	\$0.000024	\$0.000026	\$0.000024
Avoided CO2 Emissions Cost	\$0.000000	\$0.000000	\$0.000000
Fuel Hedge <sup>3</sup>	\$0.000000	\$0.000000	\$0.000000
Utility Integration & Interconnection Cost	\$0.000000	\$0.000000	\$0.000000
Utility Administration Cost	\$0.000000	\$0.000000	\$0.000000
Environmental Costs	\$0.000000	\$0.000000	\$0.000000
<b>Subtotal</b>	<b>\$0.049619</b>	<b>\$0.049609</b>	<b>\$0.049530</b>
Line Losses <sup>4</sup>	\$0.000712	\$0.000715	\$0.000711
<b>Total Value of NEM Distributed Energy</b>	<b>\$0.05033</b>	<b>\$0.05032</b>	<b>\$0.05024</b>

<sup>1</sup> “Residential PV” refers to a load shape reflecting generation installed by a residential customer. “SGS PV” refers to a load shape reflecting generation installed by a small commercial/industrial customer served under Small General Service Schedule SGS. “Large PV” refers to a load shape reflecting generation installed by a customer with higher consumption requirements and applies to all other nonresidential schedules. For the first time, the Company has separated the values for residential customers (“Residential PV”) and small commercial/industrial customers (“SGS PV”) as a result of available actual metered solar load profile data for the residential class. The Company continues to utilize third-party solar load profile data for non-residential customers.

<sup>2</sup> Avoided Criteria Pollutants reflects NOx and SOx that have been separately identified from approved marginal energy costs.

<sup>3</sup> Pursuant to the Settlement Agreement reached in DEP’s 2016 annual fuel proceeding (Docket No. 2016-3-E), the Company has calculated the hedge value and determined that no fuel hedge exists; therefore, the value is zero

<sup>4</sup> Line loss factors are 1.281% for on-peak marginal energy, 1.268% for off-peak marginal energy and 1.874% for marginal capacity per DEP’s updated 2018 line loss analysis based upon 2018 cost of service.

B.4 Distributed Energy Resource Program (“DERP”) incremental costs are required by Act 236 to be allocated and recovered based on the same method used by the utility to allocate and recover variable environmental costs and under a separate DERP component of the overall fuel factor. Therefore, ORS analyzed the actual and estimated DERP incremental costs that DEP incurred for the period of March 2018 through February 2019, the estimated costs through June 2019, and the forecasted costs for the period July 2019 through June 2020. The Parties agree with the adjustments made by the Company to the DERP incremental costs component. The Parties agree with the ending cumulative balances of DERP incremental costs for February 2019 as an under-recovered \$6,239, and June 2019 as an under-recovered \$154,634, as calculated by the Company. The Parties agree that the appropriate fixed charges per account, including gross receipts tax and regulatory fees, to recover DERP incremental costs (“DERP Charge”) for the period beginning with bills rendered from July 1, 2019 through June 30, 2020 are listed below.

DERP Charge (\$/account)		
	Annual Charge	Monthly Charge
Residential	12.00	1.00
Commercial	24.33	2.03
Industrial	1,200.00	100.00

B.5 The Parties agree that the DERP Charges as set forth above are consistent with S.C. Code Ann. §§ 58-27-865, 58-39-140 and 58-39-150 and with Commission orders.

B.6 The Parties agree that current under-collected DERP incremental costs will be treated in the same manner as other fuel and fuel-related under-collected balances are treated and any under-collection resulting from the annual cost caps mandated by Act 236 will be reallocated using each class’s contribution to peak demand. The Parties agree that in an effort to keep the Parties and DEP’s customers informed of the (over)/under-recovery balances related to DERP

incremental costs, DEP will provide to ORS and, where applicable, its customers forecasts of the expected DERP Charge to be set at its next annual fuel proceeding based upon DEP's historical (over)/under-recovery to date and DEP's forecast of DERP incremental and avoided costs. Forecasts will be provided in the same manner as forecasts of the expected fuel factor.

B.7 DERP avoided costs are required by Act 236 to be allocated and recovered based on the same method used by the utility to allocate and recover variable environmental costs and under a separate DERP component of the overall fuel factor. Therefore, ORS analyzed the DERP avoided costs that DEP reported and projected for the period of March 2018 through June 2019 and the forecasted costs for the period July 2019 through June 2020 and found them to be reasonable. The Parties agree with the adjustments made by the Company to the DERP avoided costs component. The Parties agree with the ending cumulative balances of DERP avoided costs for February 2019 as an under-recovered \$19,288, and June 2019 as an under-recovered \$19,122, as calculated by the Company.

#### **Fuel Expenses and Power Plant Operations**

B.8 The Parties agree with the adjustments made by the Company to the base fuel component. The Parties agree with the ending cumulative balances of base fuel for February 2019 as an under-recovered \$13,424,397, and June 2019 as an under-recovered \$8,404,772, as calculated by the Company.

B.9 The Parties agree with the ending cumulative balances of environmental cost for February 2019 as an under-recovered \$199,207, and June 2019 as an under-recovered \$586,199, as calculated by the Company.

B.10 ORS also analyzed DEP's calculation of the projected cumulative capacity-related cost. The Parties agree with the ending cumulative balances of capacity costs for February 2019

as an under-recovered \$574,929, and June 2019 as an under-recovered \$1,230,359, as calculated by the Company.

B.11 ORS thoroughly reviewed and investigated DEP's nuclear operations during the review period. As shown in ORS witness Seaman-Huynh's Exhibit MSH-1, DEP's nuclear fleet achieved an average system capacity factor during the review period of 89.45%. DEP achieved this capacity factor notwithstanding the fact that it experienced three (3) scheduled refueling outages, one (1) maintenance outage and four (4) forced outages during the review period. S.C. Code Ann. § 58-27-865 states that:

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation facility or system, as applicable, if the utility achieved a net capacity factor of ninety-two and one-half percent or higher during the period under review. The calculation of the net capacity factor shall exclude reasonable outage time associated with reasonable refueling, reasonable maintenance, reasonable repair, and reasonable equipment replacement outages; the reasonable reduced power generation experienced by nuclear units as they approach a refueling outage; the reasonable reduced power generation experienced by nuclear units associated with bringing a unit back to full power after an outage; Nuclear Regulatory Commission required testing outages unless due to the unreasonable acts of the utility; outages found by the commission not to be within the reasonable control of the utility; and acts of God. The calculation also shall exclude reasonable reduced power operations resulting from the demand for electricity being less than the full power output of the utility's nuclear generation system.

Excluding all reasonable outage time pursuant to S.C. Code Ann. §58-27-865(F), DEP's net capacity factor for the review period was 102.28% as reflected in DEP witness Henderson Exhibit 1.

B.12 The Parties further agree that, except as noted herein, any challenges to DEP's historical fuel cost recovery for the period ending February 28, 2019, are not subject to further review; however, the projected fuel costs for periods beginning March 1, 2019, and thereafter shall

be open issues in future fuel cost proceedings held under the procedure and criteria established in S.C. Code Ann. § 58-27-865.

### **Fuel Factors**

B.13 The appropriate fuel factors for DEP to charge for the period beginning with bills rendered in July 2019 and extending through bills rendered in June 2020 are listed below. These fuel factors include the South Carolina base fuel costs, environmental costs, avoided capacity and the DERP avoided cost, but do not include gross receipt tax and regulatory fees. The Parties agree that the fuel factors will be adjusted for billing purposes to include those amounts.

Class of Service	Base Fuel Component (¢/kWh)	Environmental Component (¢/kWh)	Capacity Related Component (¢/kWh)	DERP Avoided Cost Component (¢/kWh)	Combined Total Projected Fuel Factor (¢/kWh)
Residential <sup>5</sup>	2.090	0.075	0.697	0.003	2.865
General Service (non-demand)	2.075	0.057	0.522	0.003	2.657
General Service (demand)	2.075	<sup>6</sup>	<sup>7</sup>	<sup>8</sup>	2.075
Lighting	2.075	0.000	0.000	0.000	2.075

B.14 The Parties agree that the fuel factors set forth above are consistent with S.C. Code Ann. § 58-27-865.

### **Other**

B.15 With regard to plant outages not complete as of February 28, 2019, and plant outages where final reports (Company, contractor, government reports or otherwise) are not

<sup>5</sup> The Residential Base Fuel Factor includes the Residential Energy Conservation Discount, Rider RECD-2C, adjustment factor of 0.7268%

<sup>6</sup> The Proposed General Service (demand) Environmental Component is 10 cents per kW

<sup>7</sup> The Proposed General Service (demand) Capacity Related Component is 92 cents per kW.

<sup>8</sup> The Proposed General Service (demand) DERP Avoided Cost Component is 0 cents per kW.

available, the Parties agree that the Parties retain the right to review the reasonableness of plant outage(s) and associated costs in the review period during which the outage is completed or when the report(s) become available.

B.16 DEP agrees that in an effort to keep the ORS and DEP's customers informed of the (over)/under recovery balances related to fuel costs and of DEP's commercially reasonable efforts to forecast the expected fuel factor to be set at its next annual fuel proceeding, DEP will provide to the ORS, and where applicable, its other customers, the following information:

- a. Copies of the monthly fuel recovery reports currently filed with the Commission and ORS<sup>9</sup>; and,
- b. Quarterly forecasts (during each of the three quarters in which there is no annual fuel proceeding but not in the quarter where DEP makes its annual fuel filing) of the expected fuel factor to be set at its next annual fuel proceeding based upon DEP's historical (over)/under recovery to date and DEP's forecast of prices for uranium, natural gas, coal, oil and other fuel required for generation of electricity. DEP agrees that it will put forth its best efforts to forecast the expected fuel factor to be set at its next annual proceeding. To the extent that the forecast data required hereunder is confidential, any party or customer that wants forecasted fuel data will have to sign a non-disclosure agreement to protect the data from public disclosure and to only disclose it to employees or agents with a need to be aware of this information.

B.17 In Act 236, the Legislature included a specific requirement that all capacity costs that are recovered through the fuel factor must be allocated and recovered in accordance with the

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<sup>9</sup> The Company agrees to break-out Schedule 4 of the monthly fuel recovery reports so that each component (base fuel, environmental, avoided capacity, and DER avoided costs) is reported separately.

method used by the utility to recover variable environmental costs and included in a separate component of the fuel factor. See S.C. Code Section 58-27-865(A)(1). ORS has reviewed DEP's methodology for determining the environmental cost component of the fuel factor and the methodology for allocation and recovery of the capacity-related cost component of the fuel factor (which includes purchased power capacity costs under the Public Utility Regulatory Policies Act of 1978 ("PURPA") and natural gas transportation and storage costs), and the Parties agree that the methodology used by DEP in this proceeding are consistent with the statutory requirements of S.C. Code Ann. § 58-27-865.

B.18 DEP agrees to continue to examine and make adjustments, as necessary, to its natural gas hedging program in light of the potentially reduced volatility in the domestic natural gas market. DEP also agrees to provide monthly natural gas hedging reports to the ORS.

B.19 Nothing contained in this Stipulation alters, amends, or changes the methodology established for determining the environmental factor for DEP's rate classes as set forth in Paragraphs 3(B) and (C) of the Stipulation filed with and approved by the Commission in Docket No. 2007-1-E.

### **C. REMAINING STIPULATION TERMS AND CONDITIONS**

C.1 Further, ORS is charged by law with the duty to represent the public interest of South Carolina pursuant to S.C. Code Ann. § 58-4-10(B) (Supp. 2018). S.C. Code Ann. § 58-4-10(B) reads in part as follows:

. . . 'public interest' means the concerns of the using and consuming public with respect to public utility services, regardless of the class of customer and preservation of continued investment in and maintenance of utility facilities so as to provide reliable and high quality utility services.

ORS believes this Stipulation serves the public interest as defined above.

C.2 The Parties agree that this Stipulation is reasonable, is in the public interest, and is in accordance with law and regulatory policy. This Stipulation in no way constitutes a waiver or acceptance of the position of any Party concerning the requirements of S.C. Code Ann. § 58-27-865 (2015), S.C. Code Ann. § 58-40-10, *et seq* (2015), and Commission Order 2015-194 in any future proceeding.

C.3 The Parties agree to cooperate in good faith with one another in recommending to the Commission that this Stipulation be accepted and approved by the Commission as a fair, reasonable and full resolution in the above-captioned proceeding.

C.4 This written Stipulation contains the complete agreement of the Parties regarding this matter. There are no other terms or conditions to which the Parties have agreed. This Stipulation integrates all discussions among the Parties into the terms of this written document. The Parties agree that this Stipulation will not constrain, inhibit or impair their arguments or positions held in future proceedings, nor will this Stipulation or any of the matters agreed to in it be used as evidence or precedent in any future proceeding. If the Commission should decline to approve this Stipulation in its entirety, then any Party desiring to do so may withdraw from this Stipulation without penalty.

C.5 This Stipulation shall be interpreted according to South Carolina law.

C.6 Except as expressly set forth herein, this Stipulation in no way constitutes a waiver or acceptance of the position of any Party concerning the requirements of S.C. Code Ann. § 58-27-865, S.C. Code Ann. § 58-40-10, *et seq* (2015), and Commission Order No. 2015-194 in any future proceeding. This Stipulation does not establish any precedent with respect to the issues resolved herein, and in no way precludes any Party herein from advocating an alternative

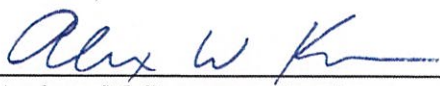
methodology under S.C. Code Ann. § 58-27-865, S.C. Code Ann. § 58-40-10, *et seq* (2015), and Commission Order No. 2015-194 in any future proceeding.

C.7 This Stipulation shall bind and inure to the benefit of each of the signatories hereto and their representatives, predecessors, successors, assigns, agents, shareholders, officers, directors (in their individual and representative capacities), subsidiaries, affiliates, parent corporations, if any, joint ventures, heirs, executors, administrators, trustees, and attorneys.

C.8 The above terms and conditions fully represent the agreement of the Parties hereto. Therefore, each Party acknowledges its consent and agreement to this Stipulation by authorizing its counsel to affix his or her signature to this document where indicated below. Counsel's signature represents his or her representation that his or her client has authorized the execution of the agreement. Facsimile signatures and e-mail signatures shall be as effective as original signatures to bind any Party. This document may be signed in counterparts, with the various signature pages combined with the body of the document constituting an original and provable copy of this Stipulation.

**[PARTY SIGNATURES TO FOLLOW ON SEPARATE PAGES]**

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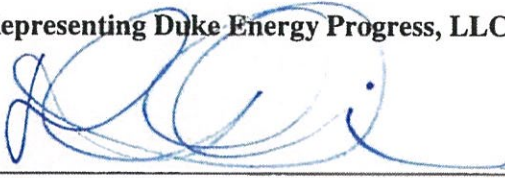


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